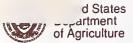
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# Idaho's Timber Production and Mill Residue, 1990

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#### **Acknowledgments**

We appreciate the cooperation of the owners and operators of Idaho's primary wood using industries in supplying data for this report.

#### **Research Summary**

Idaho's timber production in 1990 was 310.9 million cubic feet (1,687.9 million board feet, Scribner rule), down 6 percent from 1985. Sawlog production was 251.1 million cubic feet (1,399.9 million board feet). Veneer log volume was 30.1 million cubic feet (167.8 million board feet). True firs comprised 23 percent, Clearwater County 16 percent, and National Forest lands 42 percent of the harvest. Mill residue volume was 203.2 million cubic feet, 98 percent of which was used, most for pulp chips, particle board, or industrial plant fuel.

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#### Introduction

This bulletin reports the estimated timber production and mill residue in Idaho in 1990, coinciding with the year of the most recent forest inventory of the State.

The Bureau of Business and Economic Research at the University of Montana (Missoula) canvassed primary wood processing plants to collect the data for this bulletin (tables 1 through 23). Resident mills and those located outside Idaho that consumed industrial roundwood originating in Idaho were contacted. Mill operators were asked to supply information about the timber they received during 1990. This information included the volume, species, product type, ownership and county of origin of timber, and an estimate of mill residue volume by type.

Table 23 contains the factors used to convert log volumes reported by mills in board feet, Scribner rule, and other units of measure into the standard Forest Survey units of measure, cubic feet and board feet, International ½-inch rule.

#### **Timber Production**

In 1990, Idaho's timber production, which does not include fuelwood, was 310.9 million cubic feet, down almost 6 percent from 1985's 330 million cubic feet, 16 percent from 1979's 371 million cubic feet, and down 8 percent and 2 percent compared to 1969 and 1966 (fig. 1). Sawlogs continued to be the dominant product (tables 1 through 9), accounting for 81 percent of the volume of all industrial roundwood harvested. The 1990 sawlog harvest volume represents a 2 percent increase over the 1985 level, but is down by 12, 11, and 3 percent compared to levels of 1979, 1969, and 1966, respectively (fig. 1). The reported volume of veneer logs was 30.1 million cubic feet, down 5.9 million cubic feet or 16 percent from 1985, and down 36, 18, and 23 percent from 1979, 1969, and 1966, respectively. Production of round pulpwood and fiberwood logs used for oriented strand boards was 18.2 million cubic feet in 1990, a reduction of 28 percent from 1985, and down 32 percent

from 1979's production of pulpwood (there was no oriented strand board plant in 1979). The 1990 harvest was a 35 and 98 percent increase compared to the 1969 and 1966 pulpwood harvests. True firs (Abies concolor, A. grandis, and A. lasiocarpa) made up 23 percent of the harvest (tables 1-3, 10-12, 16-18, fig. 2), followed by Douglas-fir (Pseudotsuga menziesii), 22 percent; ponderosa pine (Pinus ponderosa), 18

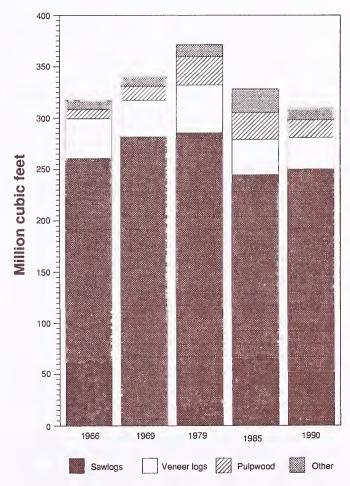


Figure 1—Idaho's timber production by product for selected years (Setzer 1971; Keegan and others 1988).

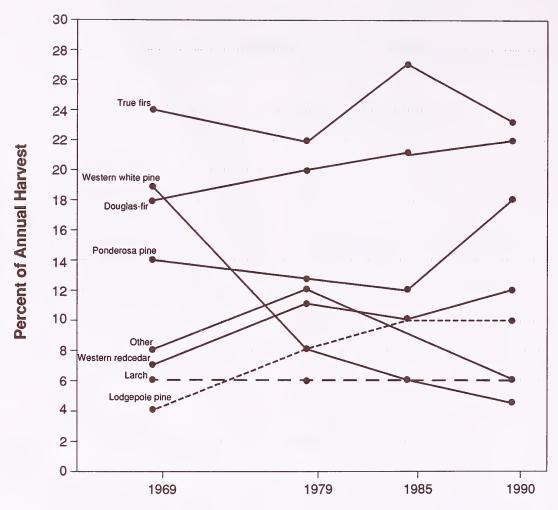


Figure 2—Tree species harvest as a percent of annual harvest for selected years, Idaho (Keegan and others 1992; Setzer 1971).

percent; lodgepole pine (*Pinus contorta*), 11 percent; and western redcedar (*Thuja plicata*), 10 percent. The remaining 16 percent consisted mainly of western larch, Engelmann spruce, western white pine, and western hemlock.

Clearwater County provided 16 percent of Idaho's harvest, followed by Bonner County (12 percent), Shoshone County (11 percent), Idaho County (10 percent), Kootenai and Benewah Counties (9 percent each), and Boise County (7 percent) (tables 7-15; fig. 3). Northern Idaho (Idaho County and north) produced 78 percent of the harvest.

An estimated 42 percent of the timber products harvested in 1990 were from National Forest lands (tables 4-6 and 13-18). Other private lands provided 22 percent of the harvest, forest industry lands 21 percent, and State lands 13 percent. The other 2 percent was from tribal lands and Bureau of Land Management lands.

#### **Harvest Composition and Removals**

The following information is provided for use in analyzing the effects of the timber harvest on the timber inventory.

Live trees provided 91 percent (282.8 million cubic feet) of the timber production; the remainder came from salvable dead timber (table 22). Of the 28.1 million cubic feet of timber products from dead trees, 11.1 million cubic feet (40 percent) were ponderosa pine, 5.3 million cubic feet (19 percent) were Douglas-fir, and 3.3 million cubic feet (12 percent) were lodgepole pine. Just over 60 percent of the dead timber was harvested from National Forest lands. Growing-stock removals associated with the timber harvest were 307.4 million cubic feet, of which 280.3 million cubic feet were logging

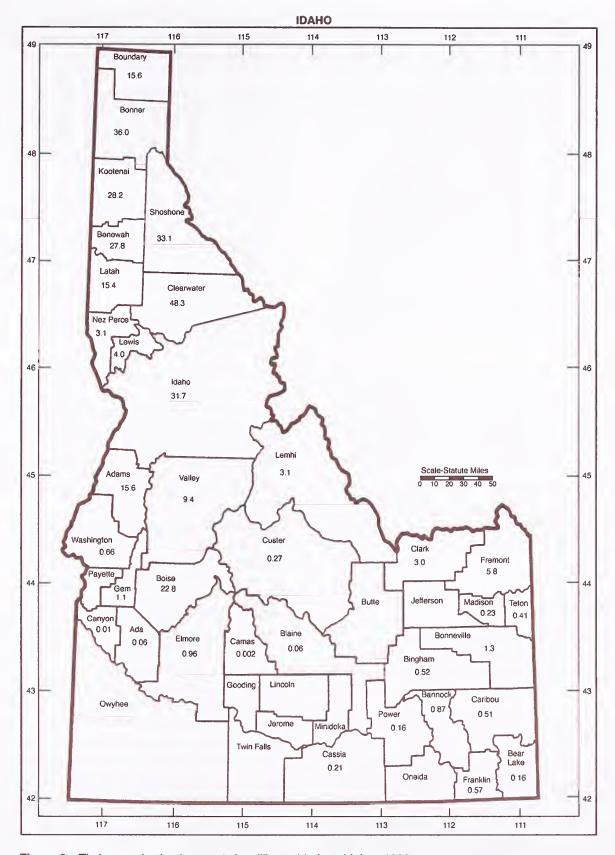


Figure 3—Timber production by county in million cubic feet, Idaho , 1990.

residue, growing-stock volume left in the woods as part of the slash.

The 310.9 million cubic feet of timber production comprised the following components:

- 280.3 million cubic feet of growing-stock volume
- 28.1 million cubic feet from salvable dead
- 2.5 million cubic feet from cull trees, tops, and stumps of growing-stock trees

310.9 total

Sawtimber removals were 1,577.2 million board feet, Scribner rule; 1,495.6 million board feet went into products, and 81.6 million board feet were logging residue. The 1,687.9 million board feet, Scribner rule, of timber production comprised the following components:

1,495.6 million board feet of sawtimber volume 150.8 million board feet from salvable dead

150.8 million board feet from salvable dead 41.5 million board feet from cull trees, tops,

stumps, and poletimber

1,687.9 total

In International ¼-inch rule, sawtimber removals were 1,788.4 million board feet; 1,695.6 million board feet went into products; and 92.8 million board feet were logging residue, sawtimber volume left in the woods as part of the slash. The 1,935.1 million board feet of timber production comprised the following components:

1,695.6 million board feet of sawtimber volume 190.7 million board feet from salvable dead 48.8 million board feet from cull trees, tops, stumps, and poletimber

1,935.1 total

#### Mill Residue

An estimated 203.2 million cubic feet of mill residue were produced in 1990 (table 20). Ninety-eight percent of this residue was used, most as pulp chips, board fiber, or industrial fuel (tables 19 and 20).

#### **Terminology**

- Bone dry unit—A quantity of wood residue that would weigh 2,400 pounds at zero percent moisture content.
- Coarse residue That part of sawmill or mill residue suitable for chipping, such as slabs, edgings, trimmings, peeler cores, and pieces of veneer not suitable for making plywood.
- Fine residue—That part of sawmill or mill residue finer than coarse residue, consisting of sawdust, shavings, and sander dust.

- Growing-stock removals (in this publication)—The growing-stock volume removed from inventory by harvesting. Consists of logging residue and the growing-stock volume of products.
- Growing-stock trees (in this publication)—Sawtimber trees and pole timber trees. These are live trees of timber species that meet specified standards of size, quality, and vigor; excludes cull trees, non-timber tree species, and dead trees. See sawtimber trees and poletimber trees.
- Growing-stock volume—Net cubic-foot volume in growing-stock trees (poletimber and sawtimber) from a 1-foot stump to a minimum 4-inch top (of central stem) diameter outside bark or to the point where the central stem breaks into limbs.
- Industrial wood products—All timber products except fuelwood.
- Logging residue—The unused growing-stock or sawtimber volume of trees cut or killed by logging and left in the woods as part of the slash.
- Noninventory product volume—The cubic volume of timber products that came from the upper stems (beyond the 4-inch top d.o.b.) or below the 1-foot high stumps of growing-stock product trees; the board-foot volume in timber products that came from poletimber trees, and from the upper stems (beyond the 7-inch or 9-inch top d.o.b.) and below the 1-foot high stumps of sawtimber trees; the product volume from cull trees.
- Mill residue—Wood material from primary manufacturing plants not utilized for the mill's primary product—includes bark, slabs, edgings, trimmings, miscuts, sawdust, and shavings.
- Poletimber trees—Live trees of timber species, at least 5-inches diameter at breast height (d.b.h.) but smaller than sawtimber size, containing at least one 8-foot bolt, and more than one-third sound.
- Removals (in this publication)—The growing-stock and sawtimber volume removed from the inventory by harvesting, consisting of logging residue and the growing-stock and sawtimber volume of products.
- Sawlog portion—That part of the bole of sawtimber trees between a 1-foot stump and the sawlog top.
- Sawlog top—The portion on the bole of sawtimber trees above which a sawlog cannot be produced. The minimum sawlog top is 7-inches diameter outside bark (d.o.b.) for softwoods and 9-inches d.o.b. for hardwoods.
- Sawtimber product volume—The sawtimber volume in timber products.

Sawtimber removals (in this publication)—The sawtimber volume removed from inventory by harvesting, consisting of logging residue and the sawtimber volume of products.

Sawtimber trees—Live trees of timber species meeting regional size and defect specifications. Softwood trees must be at least 9 inches d.b.h. and hardwood trees at least 11 inches d.b.h.

Sawtimber volume—Net volume in board feet of the sawlog portion of live sawtimber trees.

Timber production—The harvested volume of timber products. Also called industrial roundwood production or industrial wood production. Timber products or industrial roundwood (products) refer to logs, bolts, or other round sections cut from trees for industrial or consumer use and delivered "in the round" as logs or bolts to sawmills, plants, or yards. In this report, the term "timber products" does not include fuelwood. Included are sawlogs,

veneer logs, pulpwood, utility poles, corral poles and posts, house logs, and fiber logs. Mine timbers and landscaping timbers would have been included if they had been reported as harvested.

#### References

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Table 1—Cubic volume of timber products harvested in Idaho by species and product, 1990.

			F	Product					
Species	Sawlogs	Veneer logs	Pulp and fiberwood	Posts and poles	Utility poles	House logs	Cedar products	All products <sup>1</sup>	Percent
				- Thousand	cubic feet				
True fir	54,517	12,969	2,839	_	_	29	_	70,355	22.6
Western larch	15,248	1,777	139	8	_	39		17,210	5.5
Engelmann spruce	8,346	612	151	_	_	50	_	9,159	2.9
Lodgepole pine	20,429	52	7,944	4,469	125	1,025	_	34,043	10.9
Western white pine	12,733	731	898	200	_	173	_	14,735	4.7
Ponderosa pine	49,209	3,304	1,946	_	_	236	_	54,695	17.6
Douglas-fir	56,012	10,321	1,400	_	_	121	_	67,853	21.8
Western redcedar	26,531	303	385	_	690	4	4,377	32,289	10.4
Western hemlock	7,894	38	1,994	_	_	_	_	9,926	3.2
Cottonwood	_	_	489	_	_	_	_	489	0.2
Unknown	178	_	_	_	_	_	_	178	0.1
All species <sup>1</sup>	251,095	30,107	18,185	4,677	815	1,676	4,377	310,933	100.0
Percent of total	80.8	9.7	5.8	1.5	0.3	0.5	1.4	100.0	

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

Table 2—Board-foot (Scribner rule) volume of timber products harvested in Idaho by species and product, 1990.

				Product				
Species	Sawlogs	Veneer logs	Pulp and fiberwood	Posts and poles	Utility poles	House logs	Cedar products	All products <sup>1</sup>
		<b></b>		Thousand	d board fee	et		
True fir	303,934	72,302	12,788	_	_	163	_	389,187
Western larch	85,005	9,908	629	_	_	216	_	95,758
Engelmann spruce	46,529	3,413	683	_	_	276	_	50,901
Lodgepole pine	113,892	290	35,742	_	695	5,713	_	156,332
Western white pine	70,986	4,076	4,043	_	_	965		80,070
Ponderosa pine	274,338	18,421	8,758	_	_	1,318	_	302,835
Douglas-fir	312,266	57,537	6,283	_	_	674	_	376,760
Western redcedar	147,908	1,688	1,731	_	3,848	21	24,402	179,598
Western hemlock	44,007	214	9,013	_	_	_	_	53,234
Cottonwood	_	_	2,195	_	_	_	_	2,195
Unknown	991	_	_	_	_	_	_	991
All species <sup>1</sup>	1,399,856	167,849	81,865		4,543	9,346	24,402	1,687,861

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

**Table 3**—Board-foot (International ½-inch rule) volume of timber products harvested in Idaho by species and product, 1990.

				Product				
Species	Sawlogs	Veneer logs	Pulp and fiberwood	Posts and poles	Utility poles	House logs	Cedar products	All products <sup>1</sup>
				- Thousand	board fee	9t		
True fir	347,093	82,569	12,788	_	_	186	_	442,636
Western larch	97,076	11,315	629	_	_	247	_	109,266
Engelmann spruce	53,136	3,898	683	_	_	315	_	58,032
Lodgepole pine	130,065	331	35,742	_	794	6,524	_	173,456
Western white pine	81,066	4,655	4,043		_	1,102	_	90,866
Ponderosa pine	313,294	21,037	8,758	_	_	1,505	_	344,594
Douglas-fir	356,608	65,707	6,283	_	_	770	_	429,368
Western redcedar	168,911	1,928	1,731	_	4,394	24	27,867	204,855
Western hemlock	50,256	244	9,013	_	_	_	· —	59,513
Cottonwood	_	_	2,195	_	_	_	_	2,195
Unknown	1,132		_	_	_	_	_	1,132
All species	1,598,636	191,684	81,865	_	5,188	10,673	27,867	1,915,912

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

Table 4—Cubic volume of timber products harvested in Idaho by owner and product, 1990.

				Product					
Owner	Sawlogs	Veneer logs	Pulp and fiberwood	Posts and poles	Utility poles	House logs	Cedar products	All products <sup>1</sup>	Percent
				- Thousand	cubic feet				
National Forest	106,631	10,867	4,714	4,466	114	1,407	2,060	130,259	41.9
Bureau of Land									
Management	1,577	80		_	_	34	_	1,692	0.5
State	33,601	4,788	769	15	427	133	1,221	40,954	13.2
Tribal	3,985	_	_	60	_	_	54	4,098	1.3
Forest industry	48,657	13,165	3,288	_	46	15	785	65,956	21.2
Other private	56,644	1,206	9,414	136	228	88	257	67,974	21.9
All owners <sup>1</sup>	251,095	30,107	18,185	4,677	815	1,676	4,377	310,933	100.0
Percent of total	80.8	9.7	5.8	1.5	0.3	0.5	1.4	100.0	

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

Table 5—Board-foot (Scribner rule) volume of timber products harvested in Idaho by owner and product, 1990.

				Product				
Owner	Sawlogs	Veneer logs	Pulp and fiberwood	Posts and poles	Utility poles	House logs	Cedar products	All products <sup>1</sup>
				Thousand b	oard feet			
National Forest	594,468	60,584	21,234	_	635	7,842	11,486	696,249
Bureau of Land								
Management	8,793	448	_	_	_	192	_	9,433
State	187,327	26,695	3,451	_	2,378	740	6,806	227,397
Tribal	22,214	_	_	_	_	_	300	22,514
Forest industry	271,262	73,397	14,804	_	259	81	4,375	364,178
Other private	315,792	6,725	42,376	_	1,271	491	1,435	368,090
All owners <sup>1</sup>	1,399,856	167,849	81,865	_	4,543	9,346	24,402	1,687,861

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

**Table 6**—Board-foot (International ¼-inch rule) volume of timber products harvested in Idaho by owner and product, 1990.

				Product				
Owner	Sawlogs	Veneer logs	Pulp and fiberwood	Posts and poles	Utility poles	House logs	Cedar products	All products <sup>1</sup>
				- Thousand l	board feet			
National Forest Bureau of Land	678,882	69,187	21,234	_	725	8,956	13,117	792,101
Management	10,042	512	_	_	_	219	_	10,772
State	213,927	30,486	3,451	_	2,716	845	7,772	259,197
Tribal	25,368	_	_	_	_	_	343	25,711
Forest industry	309,781	83,819	14,804	_	296	93	4,996	413,789
Other private	360,634	7,680	42,376	_	1,451	561	1,639	414,341
All owners <sup>1</sup>	1,598,636	191,684	81,865	_	5,188	10,673	27,867	1,915,912

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

Table 7—Cubic volume of timber products harvested in Idaho by county and product, 1990.

				Product					
County	Sawlogs	Veneer logs	Pulp and fiberwood	Posts and poles	Utility poles	House logs	Cedar products	All products <sup>1</sup>	Percent
				Thousand	cubic feet				
Ada	7	52	_	_	_	_	_	59	0.0
Adams	12,987	2,079	439	_	_	141	_	15,647	5.0
Bannock	866	<i>_</i>	_	_	_	_	_	866	0.3
Bear Lake	161	_	_	_	_	_	_	161	0.1
Benewah	23,716	1,486	2,183	_	204	_	180	27,769	8.9
Bingham	525	_	_	_	_	_	_	525	0.2
Blaine	29	25	_	_	2	7	_	63	0.0
Boise	17,816	4,704	_	4	_	254	_	22,777	7.3
Bonner	33,180	88	1,379	490	154	147	559	35,996	11.6
Bonneville	1,167	_	_	_	_	94	_	1,261	0.4
Boundary	14,650	285	364	125	20	58	60	15,562	5.0
Camas	2	_	_	_	_	_	_	2	0.0
Canyon	11	_	_	_	_	_	_	11	0.0
Caribou	511	_	_	_	_	_	_	511	0.2
Cassia	63	_	_	150	_	_	_	213	0.1
Clark	2,798	_	_	_	_	160	_	2,958	1.0
Clearwater	32,594	11,572	2,159	_	269	8	1,713	48,315	15.5
Custer	72	_		200	2	_	· —	274	0.1
Elmore	570	384	_	_	_	3	_	957	0.3
Franklin	323	_	_	250	2	_	_	574	0.2
Fremont	2,746	_	_	2,728	22	332	_	5,829	1.9
Gem	869	211	_	_	_	_	_	1,080	0.3
Idaho	29,412	586	536	312	9	126	699	31,680	10.2
Kootenai	22,168	861	4,859	45	16	11	224	28,184	9.1
Latah	12,161	1,221	1,959	_	18	_	48	15,408	5.0
Lemhi	2,606	161	_	298	1	11	_	3,076	1.0
Lewis	1,808	64	2,179	_	_	_	4	4,055	1.3
Madison	233	_		_	_	_	_	233	0.1
Nez Perce	2,895	43	95	61	_	_	_	3,093	1.0
Power	163	_	_	_	_	_	_	163	0.1
Shoshone	25,351	5,152	1,726	_	2	15	890	33,136	10.7
Teton	362		_	10	4	38	_	414	0.1
Valley	7,771	1,047	307	4	20	273	_	9,421	3.0
Washington	502	87	_		69		_	658	0.2
All counties <sup>1</sup>	251,095	30,107	18,185	4,677	815	1,676	4,377	310,933	100.0
Percent of total	80.8	9.7	5.8	1.5	0.3	0.5	1.4	100.0	

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

Table 8—Board-foot (Scribner rule) volume of timber products harvested in Idaho by county and product, 1990.

				Product				
County	Sawlogs	Veneer logs	Pulp and fiberwood		Utility poles	House logs	Cedar products	All products <sup>1</sup>
				- Thousand	board fee	et		
Ada	40	290	_	_	_	_	_	330
Adams	72,405	11,593	1,985	_	_	786	_	86,769
Bannock	4,827	_	_	_	_	_		4,827
Bear Lake	900	_	-	_	_	_	_	900
Benewah	132,214	8,285	9,821	_	1,138	_	1,006	152,464
Bingham	2,927	_	· —	_	_	_	-,000	2,927
Blaine	160	142	_	_	12	40	_	354
Boise	99,323	26,223	_	_		1,415	_	126,961
Bonner	184,978	488	6,203	_	860	818	3,114	196,461
Bonneville	6,508	_	_	_	_	524	<del>-</del>	7,032
Boundary	81,676	1,587	1,633	_	110	325	336	85,667
Camas	10	-	_	_	_	_	_	10
Canyon	60	_	_	_	_	_	_	60
Caribou	2,850	_		_	_	_	_	2,850
Cassia	350	_	_	_	_		_	350
Clark	15,597	_	_	_	_	894	_	16,491
Clearwater	181,713	64,516	9,707	_	1,502	42	9,549	267,029
Custer	400	· —	_	_	12	_	<del>-</del>	412
Elmore	3,178	2,141		_	_	14	_	5,333
Franklin	1,800	_	_	_	9		_	1,809
Fremont	15,311	_		_	125	1,850	_	17,286
Gem	4,846	1,176	_	_	_	.,	_	6,022
idaho	163,970	3,266	2,414	_	51	704	3,899	174,304
Kootenai	123,588	4,800	21,855	_	87	63	1,250	151,643
Latah	67,797	6,808	8,835		103	_	268	83,811
Lemhi	14,526	900		_	3	60		15,489
Lewis	10,080	356	9,808	_	_	_	20	20,264
Madison	1,301	_	_	_	_	_	_	1,301
Nez Perce	16,137	237	425	_	_	-	_	16,799
Power	907		_	_			_	907
Shoshone	141,334	28,722	7,783	_	11	81	4,960	182,891
Teton	2,018		- ,		24	210	.,555	2,252
Valley	43,325	5,836	1,396	_	110	1,520	_	52,187
Washington	2,800	483	.,555	_	386	-,520	_	3,669
All counties <sup>1</sup>	1,399,856	167,849	81,865	_	4,543	9,346	24,402	1,687,861

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

**Table 9**—Board-foot (International ¼-inch rule) volume of timber products harvested in Idaho by county and product, 1990.

				Product				
		Veneer	Pulp and	Posts and	Utility	House	Cedar	All
County	Sawlogs	logs	fiberwood	poles	poles	logs	products	products1
			Ti	housand boar	d feet			
Ada	46	331	_	_	_	_	_	377
Adams	82,687	13,239	1,985		_	898	_	98,808
Bannock	5,512	_	_	_	_	_		5,512
Bear Lake	1,028	_	_	_	_	_	_	1,028
Benewah	150,988	9,461	9,821	_	1,300	_	1,149	172,719
Bingham	3,343	_	_	_	_	_	_	3,343
Blaine	183	162	_	_	14	46	_	404
Boise	113,427	29,947	_	_	_	1,616	_	144,989
Bonner	211,245	557	6,203	_	982	934	3,556	223,478
Bonneville	7,432	_	_	_	_	598	_	8,031
Boundary	93,274	1,812	1,633	_	126	371	384	97,600
Camas	11	_	_	_	_	_	_	11
Canyon	69	_	_	_	_	_	_	69
Caribou	3,255	_	_	_	_	_	_	3,255
Cassia	400	_	_	_	_	_	_	400
Clark	17,812	_	_	_	_	1,021	_	18,833
Clearwater	207,516	73,677	9,707	_	1,715	48	10,905	303,569
Custer	457	_	_	_	14	_	· —	471
Elmore	3,629	2,445	_	_	_	16	_	6,090
Franklin	2,056	_	_	_	10	_	_	2,066
Fremont	17,485	_	_	_	143	2,113	_	19,741
Gem	5,534	1,343	_	_	_	_	_	6,877
Idaho	187,254	3,730	2,414	_	58	804	4,453	198,712
Kootenai	141,137	5,482	21,855	_	99	72	1,428	170,073
Latah	77,424	7,775	8,835	_	118	_	306	94,458
Lemhi	16,589	1,028	_	_	3	69	_	17,688
Lewis	11,511	407	9,808	_	_	_	23	21,749
Madison	1,486	_	_	_	_	_	_	1,486
Nez Perce	18,428	271	425	_	_	_	_	19,124
Power	1,036	_	_	_	_	_	_	1,036
Shoshone	161,403	32,801	7,783	_	13	93	5,664	207,756
Teton	2,305	_	_	_	27	240	_	2,572
Valley	49,477	6,665	1,396	_	126	1,736	_	59,399
Washington	3,198	552	_	_	441	_	_	4,190
All counties <sup>1</sup>	1,598,636	191,684	81,865		5,188	10,673	27,867	1,915,912

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

Table 10—Cubic volume of timber products harvested in Idaho by county and species, 1990.

Species

						Salpade							
	True	Western	Engelmann	Lodgepole	Western white	Ponderosa	Douglas-	Western	Western	Cotton-		A	
County	fir	larch	spruce	pine	pine	pine	fir	redcedar	hemlock	wood	Unknown	species1	Percent
		1	1			Thousand cubic feet	bic feet		1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	
Ada	-	(2)	(2)	1	I	17	34	I	1	I	7	29	0.0
Adams	2,683	1,196	768	635	223	6,277	3,643	140	83	I	1	15,647	2.0
Bannock	43		14	170	1	1	640	I	1	1	I	866	0.3
Bear Lake	ω	1	I	73	I	1	81		I	I	l	161	0.1
Benewah	7,114	1,898	277	2,053	2,485	4,580	5,341	3,301	420	I	(2)	27,769	8.9
Bingham	21		က	217	I	1	283		1	I	:	525	0.2
Blaine	-	(²)	4	6	I	ω	42	1	1	I	l	63	0.0
Boise	2,501	564	709	485	22	12,513	5,778	114	22	I	1	22,777	7.3
Bonner	6,664	2,805	693	4,475	1,891	3,013	11,025	2,831	2,470	30	66	35,996	11.6
Bonneville	29		_	940		1	262	1	1			1,261	0.4
Boundary	2,633	1,617	200	2,159	426	209	4,656	1,079	1,709	22	51	15,562	2.0
Camas	1		1				2	1	I	1	1	N	0.0
Canyon		1	1			1	.]	I		1	11	1	0.0
Caribon	25			287	I		200	1	1	I	I	511	0.2
Cassia		1	1	181	١		31	1	I	I	I	213	0.1
Clark	141		23	1,482		l	1,312	1	I	l	I	2,958	1.0
Clearwater	17,789	1,621	1,020	1,953	2,641	2,392	6,463	12,974	1,386	7.7	l	48,315	15.5
Custer	-	l	I	217	I	1	22		I	I		274	0.1
Elmore	22	16	7	က	I	547	327		1	I		957	0.3
Franklin	16	1	1	397	1		161	1	1	I	I	574	0.2
Fremont	118		2	4,885	l	7	813		I	I	l	5,829	1.9
Gem	9/	14	10		I	735	245	1	1	I	1	1,080	0.3
Idaho	6,879	2,141	1,863	2,419	1,725	6,355	5,435	4,257	607	l	1	31,680	10.2
Kootenai	4,834	1,515	429	4,613	2,392	5,184	5,210	2,314	1,438	250	2	28,184	9.1
Latah	4,451	540	197	1,583	603	2,316	3,363	1,928	360	99	1	15,408	2.0
Lemhi	441	223	280	876	α	269	670	1	15	I	1	3,076	1.0
Lewis	879	32	31	736	315	698	738	162	292	I		4,055	1.3
Madison	=			175		1	48		1	1	ļ	233	0.1
Nez Perce	102	32	382	114	730	202	804	389	35	I	I	3,093	1.0
Power	80		က	15	I		137		I	I	l	163	0.1
Shoshone	11,007	2,706	915	2,145	1,197	3,413	8,105	2,636	964	44	4	33,136	10.7
Teton	19		_	304			06	١	1		1	414	0.1
Valley	1,676	261	200	408	20	4,617	1,725	92	06	1	1	9,421	3.0
Washington	97	30	23	36	I	269	133	69	I	I	1	658	0.2
All counties	70,355	17,210	9,159	34,043	14,735	54,695	67,853	32,289	9,926	489	178	310,933	100.0
Percent of total	22.6	5.5	2.9	10.9	4.7	17.6	21.8	10.4	3.2	0.2	0.1	100.0	

<sup>1</sup>Data may not sum to totals due to rounding or truncating. <sup>2</sup>Less than 500 cubic feet.

Table 11—Board-foot (Scribner rule) volume of timber products harvested in Idaho by county and species, 1990.

Species

						oheries						
	True	Western	Engelmann Lodgebole	Lodgepole	Western	Ponderosa	Douglas-	Western	Western	Cotton-		A
County	Ţ,	larch	spruce	pine	pine	pine	fir	redcedar	hemlock	роом	Unknown	species1
	1 1 1	1	1 1 1 1 1 1 1 1	1 1 1 1 1 1		Thousan	Thousand board feet	1		1	1 1 1 1 1	1 1 1 1 1 1
Ada	7	2	8	1	١	92	187	1	1	1	40	330
Adams	14,806	6,654	4,268	3,491	1,242	34,915	20,215	778	400	I	l	86,769
Bannock	238	1	77	946	1	I	3,566	1	1	I	I	4,827
Bear Lake	45	1	ı	405	1	1	450	1	1	I	1	006
Benewah	39,297	10,574	3,201	10,702	13,552	25,293	29,490	18,277	2,077	I	-	152,464
Bingham	118	1	19	1,210		1	1,580	1	1	I	1	2,927
Blaine	က	-	20	52	1	46	232	ı	1	ı	١	354
Boise	13,942	3,146	3,953	2,680	318	69,758	32,211	635	318	1	I	126,961
Bonner	36,961	15,640	3,862	22,102	9,850	16,655	61,367	15,722	13,613	135	554	196,461
Bonneville	328	ı	ო	5,241	1	1	1,460	ı	1	1	I	7,032
Boundary	14,641	9,016	3,905	11,636	1,817	2,802	25,959	6,014	9,493	86	286	85,667
Camas	1	1	I	1	1	1	10	1	1	1	l	10
Canyon	1	1	ı	1	1	1	1	I	1	1	09	09
Caribou	138	I	ı	1,598	1	1	1,114	1	1	1	1	2,850
Cassia	1	!	ı	175	1	l	175	1	1	1	1	320
Clark	788	1	129	8,262	l	1	7,312	1	1	1	I	16,491
Clearwater	98,746	8,994	5,646	9,877	14,721	13,062	35,840	72,329	7,471	343		267,029
Custer	9	ı	1	26	1	1	309	1	1	1	l	412
Elmore	316	88	36	14	1	3,051	1,825	1	l	l	l	5,333
Franklin	06		1	819		1	006	1	1	1	1	1,809
Fremont	657	1	30	12,024	1	40	4,535	I		1	I	17,286
Gem	425	80	53	1	1	4,097	1,367	1	1	1	l	6,022
Idaho	38,164	11,893	10,366	11,706	9,616	35,343	30,180	23,733	3,303	1	1	174,304
Kootenai	26,406	8,433	2,380	22,259	13,251	28,413	28,955	12,867	7,523	1,126	30	151,643
Latah	24,529	3,002	1,092	7,795	3,268	12,703	18,628	10,710	1,787	297	l	83,811
Lemhi	2,458	1,242	1,563	3,223	13	3,171	3,733	I	98	1	1	15,489
Lewis	4,526	175	171	3,355	1,449	4,598	3,863	773	1,354	l	l	20,264
Madison	29	1	1	926	1		266	I	1	I	I	1,301
Nez Perce	538	171	2,122	281	4,069	2,802	4,461	2,171	184	1	I	16,799
Power	45	l	18	82	1	1	762	I	I	I	I	206
Shoshone	61,018	15,056	5,074	11,243	6,628	18,810	45,008	14,673	5,165	196	50	182,891
Teton	105	1	က	1,640	1	1	504	1	I	I	l	2,252
Valley	9,244	1,424	2,774	2,239	276	25,687	9,553	530	460	1	1	52,187
Washington	543	167	131	202	1	1,497	743	386		1		3,669
All counties <sup>1</sup>	389,187	95,758	50,901	156,332	80,070	302,835	376,760	179,598	53,234	2,195	991	1,687,861
1	1-1-4-4-4-	4										

¹Data may not sum to totals due to rounding or truncating.

Table 12—Board-foot (International 1/4-inch rule) volume of timber products harvested in Idaho by county and species, 1990.

Adams         If Is alter         Incomment         Worstern         Incomment         Worstern         Pulpe         Pu							Species						
16,818   7,590   4,883   3,968   1,418   39,827   23,928   888   417   46   46   41,080   4	County	True	Western	Engelmann spruce	Lodgepole pine	Western white pine	Ponderosa pine	Douglas- fir	Western redcedar	Western hemlock	Cotton- wood	Unknown	All species¹
16,818   7,550   4,863   3,956   1,418   39,827   23,028   888   417   46   46   46   46   46   46   46   4							Thousand bo	ard feet					
16,818   7,590   4,663   3,956   1,418   39,827   23,028   888   417	Ada	∞	Ø	Ø	1	1	105	214	I	1	I	46	377
3.4         272         88         1,000         —         4072         —         —         6172         —	Adams	16,818	7,590	4,863	3,958	1,418	39,827	23,028	888	417	1		98,808
ske 45,662 12.073 3,648 11,779 15,297 28,745 35,511 20,796 2,208	Bannock	272	-	88	1,080			4,072			1	1	5,512
ah 44,662 12,073 3,646 11,779 15,297 28,745 33,511 20,796 2,208 — 1  15,922 3,593 4,514 3,061 363 70,644 36,785 725 363 — 6  16,922 3,593 4,514 3,061 13,63 70,644 36,785 725 363 — 6  16,922 3,593 4,514 3,061 13,133 2,075 3,179 22,645 6,868 10,820 396 327  11,922 3,593 4,440 13,133 2,075 3,179 22,645 6,868 10,820 396 327  11,03	Bear Lake	51	I	1	463		1	514		1			1,028
135	Benewah	44,662	12,073	3,648	11,779	15,297	28,745	33,511	20,796	2,208	1	-	172,719
15,922   3,593   4,514   3,061   363   265   70,025   17,921   15,450   135   633	Bingham	135		22	1,382	1	1	1,804	1	1	1	1	3,343
15,922   3,593   4,514   3,061   3,63   79,664   36,786   725   3,83	Blaine	က	-	23	59	1	53	265	1	1	1	1	404
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Boise	15,922	3,593	4,514	3,061	363	79,664	36,785	725	363	1		144,989
1	Bonner	42,097	17,861	4,410	24,841	11,170	18,935	70,025	17,921	15,450	135	633	223,478
any 16,699 10,296 4,460 13,133 2,075 3,179 29,645 6,868 10,820 98 327  1	Bonneville	375	1	က	5,985	1	1	1,667	1	I		١	8,031
158	Boundary	16,699	10,296	4,460	13,133	2,075	3,179	29,645	6,868	10,820	86	327	97,600
1   5	Camas		1	1	1		1	<del>-</del>	I	1	1		<del>-</del>
Table 158 — — 1,825 — — 1,272 — — — — — — — — — — — — — — — — — —	Canyon	1	1	I	1		١			1	1	69	69
ater 112,514 10,249 6,425 10,679 16,811 14,753 40,816 82,600 8,380 343  ater 112,514 10,249 6,425 10,679 16,811 14,753 40,816 82,600 8,380 343  1 361 100 45 16 16 1 1 14,753 40,816 82,600 8,380 343  1 103	Caribou	158	1	1	1,825	1	1	1,272	1	I	1		3,255
ater 112,514 10,249 6,425 10,679 16,811 14,753 40,816 82,600 8,380 343 — — — — — — — — — — — — — — — — — —	Cassia			1	200		1	200	1			1	400
ater 112,514 10,249 6,425 10,679 16,811 14,753 40,816 82,600 8,380 343 — — — — — — — — — — — — — — — — — —	Clark	006	1	147	9,435		1	8,350	1	1	1	1	18,833
The first state of the first sta	Clearwater	112,514	10,249	6,425	10,679	16,811	14,753	40,816	82,600	8,380	343	1	303,569
nt 103 — 935 — 935 — 1,028 — — — — — — — — — — — — — — — — — — —	Custer	7	1	1	111		١	353	١	١	i	1	471
nt 103 — — 935 — — 4,679 1,561 — — — — — — — — — — — — — — — — — — —	Elmore	361	100	45	16	1	3,484	2,084	1	1		I	060'9
nt         750         34         13,731         —         46         5,179         —	Franklin	103		1	935			1,028	1	1	1	1	2,066
485         91         61         —         4,679         1,561         —         <	Fremont	750		34	13,731		46	5,179	I			١	19,741
43,474         13,568         11,824         13,334         10,981         40,307         34,397         27,103         3,724         —         —           29,834         9,627         2,714         23,512         15,085         32,158         33,013         14,674         8,297         1,126         34           27,838         3,421         1,240         8,287         3,679         14,378         21,201         12,208         1,908         297         —           2,807         1,418         1,785         3,681         15         3,621         4,263         —         98         —         —           2,807         1,418         1,785         3,681         1,669         5,108         4,266         803         1,378         —         —           2,807         1,418         1,785         3,387         1,469         5,108         2,479         202         —         —           srce         595         193         2,421         3,15         4,647         3,190         5,082         2,479         202         —         —           srce         595         193         1,873         1         1,449         5,1292         16,744	Gem	485	91	61	1		4,679	1,561	1	1		1	6,877
29,834         9,627         2,714         23,512         15,085         32,158         33,013         14,674         8,297         1,126         34           27,838         3,421         1,240         8,287         3,679         14,378         21,201         12,208         1,908         297         —           2,807         1,418         1,785         3,681         15         3,621         4,263         —         98         —         —           2,807         1,418         1,785         3,387         1,469         5,108         4,266         803         1,378         —         —           4,948         197         193         3,387         1,469         5,108         4,266         803         1,378         —         —           57         —         —         1,115         —         —         304         —         —         —         —           59         193         2,421         315         4,647         3,190         5,082         2,479         502         —         —         —           51         —         —         —         —         —         —         —         —         —         — <td>Idaho</td> <td>43,474</td> <td>13,568</td> <td>11,824</td> <td>13,334</td> <td>10,981</td> <td>40,307</td> <td>34,397</td> <td>27,103</td> <td>3,724</td> <td> </td> <td>1</td> <td>198,712</td>	Idaho	43,474	13,568	11,824	13,334	10,981	40,307	34,397	27,103	3,724		1	198,712
27,838         3,421         1,240         8,287         3,679         14,378         21,201         12,208         1,908         297         —           2,807         1,418         1,785         3,681         15         3,621         4,263         —         98         —         —           4,948         197         193         3,387         1,469         5,108         4,266         803         1,378         —         —           srce         595         193         2,421         315         4,647         3,190         5,082         2,479         202         —         —           51         —         2,1         34         —         870         —         —         —         —           5ne         69,471         17,176         5,777         12,417         7,540         21,349         51,292         16,744         5,771         196         23           120         —         3         1,873         —	Kootenai	29,834	9,627	2,714	23,512	15,085	32,158	33,013	14,674	8,297	1,126	34	170,073
2,807         1,418         1,785         3,681         15         3,621         4,263         —         98         —         —           4,948         197         193         3,387         1,469         5,108         4,266         803         1,378         —         —           Frce         595         193         2,421         315         4,647         3,190         5,082         2,479         202         —         —           51         —         21         94         —         —         870         —         —         —         —           5ne         69,471         17,176         5,777         12,417         7,540         21,349         51,292         16,744         5,771         196         23           120         —         3         1,873         —         —         —         —         —         —           10,493         1,618         3,160         2,537         315         29,303         10,870         605         498         —         —           ond         620         191         150         2,537         315         29,303         10,870         605         498         —	Latah	27,838	3,421	1,240	8,287	3,679	14,378	21,201	12,208	1,908	297	I	94,458
4,948 197 193 3,387 1,469 5,108 4,266 803 1,378 — — — — — — — — — — — — — — — — — — —	Lemhi	2,807	1,418	1,785	3,681	15	3,621	4,263	1	86		1	17,688
From 67 — — 1,115 — — 304 — — 304 — — — — — — — — — — — — — — — — — — —	Lewis	4,948	197	193	3,387	1,469	5,108	4,266	803	1,378			21,749
Free 595 193 2,421 315 4,647 3,190 5,082 2,479 202 — — — — — — — — — — — — — — — — — —	Madison	29	1	1	1,115		I	304	1	1	1	1	1,486
51 — 21 94 — 870 — — 870 — — — 23 12,417 7,540 21,349 51,292 16,744 5,771 196 23 12	Nez Perce	595	193	2,421	315	4,647	3,190	5,082	2,479	202		1	19,124
one     69,471     17,176     5,777     12,417     7,540     21,349     51,292     16,744     5,771     196     23       120     —     3     1,873     —     —     —     —     —     —     —       10,493     1,618     3,160     2,537     315     29,303     10,870     605     498     —     —       option     620     191     150     231     —     1,710     849     441     —     —     —       nutries¹     442,636     109,266     58,032     173,456     90,866     344,594     429,368     204,855     59,513     2,195     1,132     1,132     1,132     1,132	Power	51		21	94		I	870	1	1		1	1,036
120 — 3 1,873 — 576 — — — — — — — — — — — — — — — — — — —	Shoshone	69,471	17,176	5,777	12,417	7,540	21,349	51,292	16,744	5,771	196	23	207,756
10,493 1,618 3,160 2,537 315 29,303 10,870 605 498 — — — — — — — — — — — — — — — — — — —	Teton	120	1	ო	1,873		1	929	1	1	1		2,572
620 191 150 231 —— 1,710 849 441 —— ——————————————————————————————	Valley	10,493	1,618	3,160	2,537	315	29,303	10,870	605	498		1	59,399
442,636 109,266 58,032 173,456 90,866 344,594 429,368 204,855 59,513 2,195 1,132	Washington	620	191	150	231	1	1,710	849	441		1	1	4,190
	All counties		109,266	58,032	173,456	90,866	344,594	429,368	204,855	59,513	2,195		1,915,912

'Data may not sum to totals due to rounding or truncating.

Table 13—Cubic volume of timber products harvested in Idaho by county and owner, 1990.

			0	wner				
County	National Forest	Bureau of Land Management	State	Tribal	Forest Industry	Other private	All owners <sup>1</sup>	Percent
			Thou	sand cubic fe	et			
Ada	_	_	_	_	_	59	59	0.0
Adams	13,210	_	39	_	1,365	1,034	15,647	5.0
Bannock	_	_	_	_	_	866	866	0.3
Bear Lake	143	_	18		_	_	161	0.1
Benewah	6,986	_	3,218	2,082	9,572	5,911	27,769	8.9
Bingham	· —	_	256	_	_	269	525	0.2
Blaine	63	_	_	_	_	_	63	0.0
Boise	17,606	496	1,909	_	810	1,956	22,777	7.3
Bonner	14,511	327	5,658	_	2,782	12,717	35,996	11.6
Bonneville	1,016	_	108		_	138	1,261	0.4
Boundary	7,434	49	1,925	_	1,412	4,741	15,562	5.0
Camas	_	_	2	_	´ —	_	2	0.0
Canyon	_	_		_	_	11	11	0.0
Caribou	475	_	36	_	_	_	511	0.2
Cassia	213	_	_	_	_	_	213	0.1
Clark	2,641	33	141	_	_	143	2,958	1.0
Clearwater	8,372	_	14,143	41	22,602	3,158	48,315	15.5
Custer	274	_	_	_		_	274	0.1
Elmore	941	_	13	_	_	3	957	0.3
Franklin	539	_	36	_	_	_	574	0.2
Fremont	5,612	_	141	_	_	75	5,829	1.9
Gem	834	_	126	_	_	121	1,080	0.3
Idaho	17,499	715	1,520	_	3,390	8,557	31,680	10.2
Kootenai	8,435	<del>-</del>	3,420	_	3,626	12,703	28,184	9.1
Latah	3,971	_	987	_	5,048	5,401	15,408	5.0
Lemhi	2,700	_	359	_		18	3,076	1.0
Lewis	_,, 00	_	136	134	_	3,785	4,055	1.3
Madison	_	_	162	_	_	72	233	0.1
Nez Perce	_	_	51	1,841	_	1,202	3,093	1.0
Power	_	71	_		_	91	163	0.1
Shoshone	11,268		4,404	_	13,694	3,770	33,136	10.7
Teton	350	_	64		10,034	<u> </u>	414	0.1
Valley	4,754		2,066		1,610	992	9,421	3.0
Washington	411	_	18		46	182	658	0.2
All counties <sup>1</sup>	130,259	1,692	40,954	4,098	65,956	67,974	310,933	100.0
Percent of total	41.9	0.5	13.2	1.3	21.2	21.9	100.0	100.0
- CICOIII OI IUIAI	41.5	0.5	13.2	1.0	21.2	21.3	100.0	

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

**Table 14**—Board-foot (Scribner rule) volume of timber products harvested in Idaho by county and owner, 1990.

	Owner									
		Bureau								
	National	of Land			Forest	Other	All			
County	Forest	Management	State	Tribal	industry	private	owners1			
			Tho	usand board fe	et					
Ada	_		_	_	_	330	330			
Adams	73,182	_	216	_	7,608	5,763	86,769			
Bannock	_	_		_	_	4,827	4,827			
Bear Lake	800	_	100	_	_	_	900			
Benewah	38,765	_	17,754	11,607	52,575	31,763	152,464			
Bingham	_	_	1,427	<i>_</i>	_	1,500	2,927			
Blaine	354		_	_	_		354			
Boise	98,132	2,767	10,645	_	4,515	10,902	126,961			
Bonner	78,670	1,824	31,546	_	15,508	68,913	196,461			
Bonneville	5,664		600	_		768	7,032			
Boundary	40,382	274	10,706	_	7,873	26,432	85,667			
Camas	· <u> </u>	_	10		-,0,0	20, 102	10			
Canyon	_		_	_	_	60	60			
Caribou	2,650	_	200	_	_	_	2,850			
Cassia	350	_	_	_	_	_	350			
Clark	14,721	185	785	_	_	800	16,491			
Clearwater	45,117	_	78,820	231	125,414	17,447	267,029			
Custer	412	_		_	-	17,447	412			
Elmore	5,248		71	_	_	14	5,333			
Franklin	1,609		200	_	_	- 17	1,809			
Fremont	16,081	_	785	_	_	420	17,286			
Gem	4,650	_	700	_	_	672	6,022			
Idaho	95,408	3,985	8,397	_	18,899	47,615	174,304			
Kootenai	46,928		19,039	_	19,642	66,034	151,643			
Latah	21,895	_	5,338	_	26,569	30,009	83,811			
Lemhi	13,389	_	2,000	_	20,303	100	15,489			
Lewis	10,000	_	726	748	_	18,790	20,264			
Madison	_	_	901	740		400	1,301			
Nez Perce	_	_	256	9,928	_	6,615	16,799			
Power	_	398	250	9,320		509	907			
Shoshone	61,434	330	24,255	_	76,342	20,860	182,891			
Teton	1,953		299	_	70,342	20,000	2,252			
Valley	26,163	_	11,520	_	<u> </u>	5,530	52,187			
Washington	2,292	_	101	_	259	1,017	3,669			
_										
All counties <sup>1</sup>	696,249	9,433	227,397	22,514	364,178	368,090	1,687,861			

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

**Table 15**—Board-foot (International <sup>1</sup>/<sub>4</sub>-inch rule) volume of timber products harvested in Idaho by county and owner, 1990.

	Owner							
	National	Bureau of Land			Forest	Other	All	
County	Forest	Management	State	Tribal	industry	private	owners1	
			Thou	usand board f	eet			
Ada	_	_	_	_	_	377	377	
Adams	83,292	_	247	_	8,688	6,581	98,808	
Bannock	_	_	_	_	_	5,512	5,512	
Bear Lake	914	_	114	_	_	_	1,028	
Benewah	44,167	_	20,168	13,255	59,567	35,562	172,719	
Bingham	_	_	1,630	_	-	1,713	3,343	
Blaine	404	_	_	_	_	_	404	
Boise	112,067	3,160	12,157	_	5,156	12,450	144,989	
Bonner	89,841	2,083	36,026	_	17,710	77,818	223,478	
Bonneville	6,468	_	685	_	_	877	8,031	
Boundary	45,884	313	12,226	_	8,991	30,185	97,600	
Camas	<i>'</i> —		11	_	_	_	11	
Canyon		_	_	_	_	69	69	
Caribou	3,026	_	228	_	_	_	3,255	
Cassia	400	_			_	_	400	
Clark	16,811	211	896	_	_	914	18,833	
Clearwater	50,601		90,000	264	142,875	19,828	303,569	
Custer	471	_	_	_	· —	· —	471	
Elmore	5,993	_	81	_	_	16	6,090	
Franklin	1,837	_	228	_	_	_	2,066	
Fremont	18,365	_	896	_	_	480	19,741	
Gem	5,310	_	799	_	_	767	6,877	
Idaho	108,715	4,551	9,541		21,583	54,323	198,712	
Kootenai	53,531		21,730	_	22,090	72,721	170,073	
Latah	24,857	_	5,996	_	29,402	34,202	94,458	
Lemhi	15,290	_	2,284	_		114	17,688	
Lewis	.0,200	_	810	854		20,085	21,749	
Madison	_	_	1,029	_	_	457	1,486	
Nez Perce			280	11,338	_	7,506	19,124	
Power	_	455	_	- 11,000	_	581	1,036	
Shoshone	69,328	_	27,520		87,183	23,726	207,756	
Teton	2,230	_	341	_	G7,100	20,720	2,572	
Valley	29,680	_	13,156	_	10,248	6,315	59,399	
Washington	2,617	_	115	_	296	1,161	4,190	
All counties <sup>1</sup>	792,101	10,772	259,197	25,711	413,789	414,341	1,915,912	

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

Table 16—Cubic volume of timber products harvested in Idaho by species and owner, 1990.

	-			Owner				
Species	National Forest	Bureau of Land Management	State	Tribal	Forest industry	Other private	All owners¹	Percent
				Thousand o	ubic feet			
True fir	24,542	197	11,119	686	21,071	12,740	70,355	22.6
Western larch	7,124	108	2,525	196	3,534	3,723	17,210	5.5
Engelmann spruce	4,110	149	1,015	306	1,843	1,736	9,159	2.9
Lodgepole pine	16,481	202	2,941	280	5,158	8,981	34,043	10.9
Western white pine	4,560	83	2,197	583	3,611	3,701	14,735	4.7
Ponderosa pine	29,710	399	5,189	495	7,193	11,710	54,695	17.6
Douglas-fir	30,856	460	8,361	1,003	11,094	16,079	67,853	21.8
Western redcedar	9,243	9	6,413	505	10,358	5,762	32,289	10.4
Western hemlock	3,427	85	1,163	43	1,996	3,212	9,926	3.2
Cottonwood	110	_	_		99	280	489	0.2
Unknown	95		32	(2)	_	50	178	0.1
All species <sup>1</sup>	130,259	1,692	40,954	4,098	65,956	67,974	310,933	100.0
Percent of total	41.9	0.5	13.2	1.3	21.2	21.9	100.0	

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating. <sup>2</sup>Less than 500 cubic feet.

Table 17—Board-foot (Scribner rule) volume of timber products harvested in Idaho by species and owner, 1990.

	Owner							
Species	National Forest	Bureau of Land Management	State	Tribal	Forest industry	Other private	All owners <sup>1</sup>	
			T/	nousand boar	rd feet			
True fir	135,754	1,099	61,801	3,824	117,045	69,664	389,187	
Western larch	39,579	604	14,054	1,094	19,701	20,726	95,758	
Engelmann spruce	22,806	831	5,638	1,706	10,272	9,648	50,901	
Lodgepole pine	66,415	1,127	16,122	1,225	26,989	44,454	156,332	
Western white pine	24,245	465	12,191	3,252	19,881	20,036	80,070	
Ponderosa pine	164,993	2,222	28,824	2,760	39,764	64,272	302,835	
Douglas-fir	171,408	2,562	46,483	5,594	61,674	89,039	376,760	
Western redcedar	51,500	49	35,723	2,816	57,644	31,866	179,598	
Western hemlock	18,528	474	6,382	242	10,764	16,844	53,234	
Cottonwood	490	_	_		444	1,261	2,195	
Unknown	531	_	179	1		280	991	
All species <sup>1</sup>	696,249	9,433	227,397	22,514	364,178	368,090	1,687,861	

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

Table 18—Board-foot (International ¼-inch rule) volume of timber products harvested in Idaho by species and owner, 1990.

	Owner								
Species	National Forest	Bureau of Land Management	State	Tribal	Forest industry	Other private	All owners <sup>1</sup>		
			- Thousan	d board fee	et				
True fir	154,388	1,255	70,462	4,367	133,413	78,751	442,636		
Western larch	45,139	690	16,040	1,249	22,499	23,649	109,266		
Engelmann spruce	25,977	949	6,429	1,948	11,731	10,998	58,032		
Lodgepole pine	74,819	1,287	18,305	1,399	29,770	47,877	173,456		
Western white pine	27,653	531	13,887	3,714	22,557	22,524	90,866		
Ponderosa pine	188,042	2,538	32,854	3,152	45,211	72,798	344,594		
Douglas-fir	195,385	2,926	53,011	6,388	70,327	101,331	429,368		
Western redcedar	58,798	56	40,781	3,216	65,766	36,238	204,855		
Western hemlock	20,805	541	7,225	276	12,072	18,594	59,513		
Cottonwood	490	-	_	_	444	1,261	2,195		
Unknown	606	_	204	1	_	320	1,132		
All species <sup>1</sup>	792,101	10,772	259,197	25,711	413,789	414,341	1,915,912		

<sup>&</sup>lt;sup>1</sup>Data may not sum to totals due to rounding or truncating.

**Table 19**—Estimated volume, in bone dry units, of used and unused residue from mills in Idaho, 1990 (Keegan and others 1992).

		Product				
Residue	Pulp and boards	Plant fuel	Other	Total used	Unused	Total produced
			Thousand bo	one dry units -		
Bark	_	340	51	392	23	415
Coarse <sup>1</sup>	988		13	1,001	5	1,006
Fines <sup>2</sup>	396	255	24	675	22	697
Total	1,383	595	88	2,067	50	2,117

<sup>&</sup>lt;sup>1</sup>Material suitable for chipping, such as slabs, edgings, and trim.

**Table 20**—Estimated volume, in thousand cubic feet<sup>1</sup>, of used and unused residue from mills in Idaho, 1990.

		Product				_
Residue	Pulp and boards	Plant fuel	Other	Total used	Unused	Total produced
			Thousand	cubic feet		
Bark	_	32,647	4,942	37,589	2,206	39,794
Coarse <sup>2</sup>	94,821	_	1,228	96,049	520	96,569
Fines <sup>3</sup>	37,986	24,487	2,323	64,795	2,084	66,879
Total	132,806	57,134	8,493	198,433	4,809	203,242

¹Residue data were reported in bone dry units (Keegan and others 1992). A BDU/cubic feet conversion factor was unavailable; however, Cunit conversions were available for both pounds and cubic feet. BDU's were converted to cubic feet as follows:

Therefore

Table 21—Cubic volume of timber products¹ harvested in Idaho by size² of mill, plant, or yard receiving products, 1990.

Mill capacity	Production
Million board feet,	Million cubic
Scribner rule	feet
More than 50	110.9
More than 25 to 50	143.0
More than 10 to 25	23.3
More than 1 to 10	11.7
1 or less	2.9
Tota	al 291.8

<sup>&</sup>lt;sup>1</sup>Products include sawlogs, veneer logs, utility poles, house logs, and fiberwood. Does not include pulp, posts and small poles, and cedar products.

<sup>&</sup>lt;sup>2</sup>Sawdust and planer shavings.

<sup>1</sup> bone dry unit = 2,400 pounds (ovendry weight)

<sup>1</sup> Cunit = 2,500 pounds (ovendry weight) = 100 cubic feet

<sup>1</sup> bone dry unit =  $\frac{2,400}{2,500}$  x 100 = 96 cubic feet

<sup>&</sup>lt;sup>2</sup>Material suitable for chipping, such as slabs, edgings, and trim.

<sup>&</sup>lt;sup>3</sup>Sawdust and planer shavings.

<sup>&</sup>lt;sup>2</sup>Size classes are based on the annual capacity to process logs.

Table 22—Timber production and timber removals by source of material and product, Idaho, 1990.

		Product volume	1		·
Products and additional removals	Total	From live trees	From salvable dead	Noninventory product volume <sup>2</sup>	Growing- stock
	10141				removals <sup>3</sup>
Sawlogs <sup>4</sup>	054.005			feet	
Veneer logs⁴	251,095	232,584	18,511	2,093	230,491
Pulp and fiberwood <sup>5</sup>	30,107	24,763	5,344	223	24,540
Posts and poles <sup>6</sup>	18,185	17,125	1,060	154	16,971
Utility poles	4,677 815	3,834	843	34	3,800
House logs4	1,676	809	6	7	802
Cedar products⁴	4,377	711	965	6	705
•		3,008	1,369	27	2,981
Total	310,933	282,834	28,099	2,544	280,290
Logging residue <sup>8</sup>					27,150
Total	310,933	282,834	28,099	2,544	307,440
					Sawtimber removals <sup>9</sup>
		Thousand b	oard feet (Scrib	ner rule)	
Sawlogs⁴	1,399,856	1,296,657	103,199	35,010	1,261,647
Veneer logs⁴	161,849	138,053	29,796	3,727	134,326
Pulp and fiberwood <sup>5</sup>	81,865	77,142	4,723	2,083	75,059
Posts and poles <sup>6</sup>	_	_		_	_
Utility poles <sup>7</sup>	4,543	4,508	35	122	4,386
House logs⁴	9,346	3,965	5,381	107	3,858
Cedar products⁴	24,402	16,768	7,634	453	16,315
Total	1,687,861	1,537,093	150,768	41,502	1,495,591
Logging residue <sup>8</sup>	_	_	-	_	81,617
Total	1,687,861	1,537,093	150,768	41,502	1,577,208
		· Thousand boar	d feet (Internatio	onal <sup>1</sup> /4-inch rule)	
Sawlogs <sup>4</sup>	1,598,635	1,480,782	117,853	41,462	1,439,320
Veneer logs⁴	191,683	157,656	34,027	4,414	153,242
Pulp and fiberwood <sup>5</sup>	81,865	77,142	4,723	2,160	74,982
Posts and poles <sup>6</sup>	,000		-,,, 20	_,,,,,	- 4,002
Utility poles <sup>7</sup>	5,188	5,148	40	144	5,004
House logs⁴	10,673	4,528	6,145	127	4,401
Cedar products⁴	47,016	19,149	27,867	536	18,613
Total	1,935,060	1,744,405	190,655	48,843	1,695,562
Logging residue <sup>8</sup>		_	_	_	92,797
Total	1,935,060	1,744,405	190,655	48,843	1,788,359

<sup>&#</sup>x27;Sawlogs, veneer logs, pulp and fiberwood, post and poles, utility poles, house logs, and cedar products volumes (from mill canvass).

<sup>2</sup>Noninventory product volume (see Terminology for definition).

<sup>3</sup>Growing-stock and sawtimber removals (see Terminology for definition).

"Volumes reported in thousand board feet (Scribner rule). Cubic-/board-foot conversions are from logging utilization study (McLain, in preparation).

<sup>5</sup>Conversion factors derived from data supplied by the forest products industry to the Bureau of Business and Economic Research, University of Montana. Round pulpwood and fiberwood were reported in mixed units. These units were converted to cords. Cords were converted to thousand board feet (Scribner rule and International <sup>1</sup>/<sub>4</sub>-inch rule) using 3 cords/thousand board feet. Board feet were converted to cubic feet at the rate of 4.5 board feet/cubic foot.

<sup>6</sup>Posts and small poles were reported in number of pieces and their respective dimensions. The cubic volume was calculated using the dimension information, then average cubic volume/piece was calculated. Posts and small poles with small-end diameters less than 6 inches have 0 board feet.

7Utility poles were reported in thousand board feet (Scribner rule) and number of pieces. The conversions from thousand board feet (Scribner rule) to thousand board feet (International ¼-inch rule) and thousand cubic feet are from the logging utilization study (McLain, in preparation).

<sup>9</sup>Logging residue is the unused portions within the merchantable sections of growing-stock trees cut or killed during logging.

<sup>9</sup>Sawtimber removals (see Terminology for definition).

Table 23—Conversion factors used in preparing volume statistics for this report.

				Board feet		
Product	Cords	Piece	Cubic feet	Scribner rule	International	
Sawlogs and						
other roundwood <sup>1</sup>			1.000	5.575	6.366	
Sawlogs and						
other roundwood <sup>1</sup>	_	_	_	1.000	1.142	
Pulpwood and fiberwood <sup>2</sup>	1		74.000	333.333	333.333	
Pulpwood and fiberwood <sup>2</sup>		_	1.000	4.500	4.500	
Utility poles <sup>3</sup>		1	20.628	115.000	131.318	
Posts and small poles <sup>4</sup>		1	1.200	_	-	

#### Mill Residues

Mill residue reported in Bone Dry Units (BDU's) and converted to cubic feet as follows:

1 bone dry unit = 2,400 pounds (oven dry weight)

1 Cunit = 2,500 pounds (oven dry weight) = 100 cubic feet

1 bone dry unit =  $\frac{2,400}{2,500}$  x 100 = 96 cubic feet

<sup>&</sup>lt;sup>1</sup>Other roundwood comprises veneer logs, house logs, and cedar products. The conversion factors for sawlogs and other roundwood were derived from logging utilization data collected on active logging operations in Idaho in 1989.

<sup>&</sup>lt;sup>2</sup>Conversion factors derived from data supplied by the forest products industry to the Bureau of Business and Economic Research, University of Montana. Round pulpwood and fiberwood was reported in mixed units. These units were converted to cords. Cords were converted to thousand board feet (Scribner rule and International <sup>1</sup>/<sub>4</sub>-inch rule) using 3 cords/thousand board feet. Board feet were converted to cubic feet at the rate of 4.5 board feet/cubic foot.

<sup>&</sup>lt;sup>3</sup>Utility poles were reported in thousand board feet (Scribner rule) and number of pieces, which provided the means for computing the average number of board feet/piece. The conversions from thousand board feet (Scribner rule) to cubic volume and thousand board feet (International <sup>1</sup>/<sub>4</sub>-inch rule) used the same factors as were used for sawlogs and other roundwood.

<sup>&</sup>lt;sup>4</sup>Posts and small poles were reported in number of pieces and their respective dimensions. The cubic volume was calculated using the dimension information, then average cubic volume/piece was calculated. Posts and poles with small-end diameters less than 6 inches have 0 board feet.



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Reports 1990 timber production estimates for Idaho by county, species, owner, and product. Also reports estimates of mill residue by use. Data obtained by canvassing primary wood processors in Idaho and out-of-State mills receiving logs harvested in Idaho.

Keywords: timber products output, sawlog production, industrial roundwood, primary wood products, timber harvest, growing-stock removals







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The Intermountain Research Station territory includes Montana, Idaho, Utah, Nevada, and western Wyoming. Eighty-five percent of the lands in the Station area, about 231 million acres, are classified as forest or rangeland. They include grasslands, deserts, shrublands, alpine areas, and forests. They provide fiber for forest industries, minerals and fossil fuels for energy and industrial development, water for domestic and industrial consumption, forage for livestock and wildlife, and recreation opportunities for millions of visitors.

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